

## Message Text

PAGE 01 NATO 02142 01 OF 02 201318Z

44

ACTION EUR-12

INFO OCT-01 ISO-00 EURE-00 SSO-00 NSCE-00 USIE-00 INRE-00

CIAE-00 PM-04 H-02 INR-07 L-03 NSAE-00 NSC-05 PA-01

PRS-01 SP-02 SS-15 ACDA-07 TRSE-00 SAJ-01 EB-07

FEAE-00 OES-06 /074 W

----- 014362

O R 201130Z APR 76

FM USMISSION NATO

RUEKJCS/SECDEF WASHDC IMMEDIATE

SECSTATE WASHDC IMMEDIATE 7055

INFO CINCLANT

CINCUSAFE

CINCUSAREUR

CINCUSNAVEUR

USCINCEUR

USLOSACLANT

USNMR SHAPE

DFSC CAMERON STATION VA

CSAF

C O N F I D E N T I A L SECTION 1 OF 2 USNATO 2142

E.O. 11652: GDS TAGS: MARR, NATO

SUBJ: AD HOC COMMITTEE ON EQUIPMENT INTEROPERABILITY:

PROGRESS REPORT BY WORKING GROUP NO. 4 ON FUELS

REF: USNATO 1841 (DTG 031540Z APR 76)

THERE FOLLOWS BELOW TEXT OF PROGRESS REPORT BY WORKING GROUP

NO. 4 ON FUELS, AC/297-D/8, WHICH CONTAINS RECOMMENDATIONS FOR

AD HOC COMMITTEE CONSIDERATION ON APRIL 22. WE BELIEVE THE

REPORT IS ACCEPTABLE AND RECOMMEND APPROVAL.

ACTION REQUESTED: WASHINGTON AUTHORIZATION BY OPENING OF

BUSINESS APRIL 22 TO APPROVE REPORT.

BEGIN TEXT OF AC/297-D/8.

CONFIDENTIAL

PAGE 02 NATO 02142 01 OF 02 201318Z

ORIGINAL: ENGLISH DOCUMENT

13TH AC/297-D/8

AC/297(WG/4)D/2

AD HOC COMMITTEE ON EQUIPMENT INTEROPERABILITY  
WORKING GROUP NO. 4 ON FUELS (WG/4)  
PROGRESS REPORT

THE WORKING GROUP ON FUELS HAS HELD TWO MEETINGS (2DN TO 4TH MARCH AND 29TH MARCH TO 1ST APRIL, 1976). THE COUNTRIES WHO HAVE PARTICIPATED IN ITS WORK ARE BELGIUM, CANADA (OBSERVER), DENMARK, FRANCE, GERMANY, ITALY, THE NETHERLANDS, NORWAY, TURKEY, THE UNITED KINGDOM AND THE UNITED STATES. REPRESENTATIVES HAVE ATTENDED FROM SHAPE (WHO ALSO ACTED FOR SACLANT), THE MILITARY AGENCY FOR STANDARDISATION (MAS), THE CENTRAL EUROPE OPERATING AGENCY (CEOA), AND THE INTERNATIONAL CIVIL AND MILITARY STAFFS.

2. THE GROUP BASED ITS WORK ON THE BASIC DOCUMENT AC/297-WP/2, BUT FOUND IT NECESSARY TO MAKE CORRECTIONS TO IT AND OBTAIN FURTHER INFORMATION.

3. THE GROUP DIVIDED INTO TWO SUB-GROUPS TO HANDLE THE INITIAL ISSUES GIVEN TO IT ON FUELS FOR NAVAL SHIPS AND JET AIRCRAFT. WHILE THE NAVAL SHIPS SUB-GROUP WAS ABLE TO PRODUCE A FINAL REPORT THE JET AIRCRAFT SUB-GROUP WAS ONLY ABLE TO PRODUCE AN INTERIM REPORT BY SPRING 1976 IN VIEW OF THE COMPLEXITY OF THE QUESTIONS WITH WHICH IT WAS FACED. THESE REPORTS WERE ACCEPTED BY THE WORKING GROUP ITSELF WHICH NOW REPORTS ON THE TWO ISSUES IN THE PARAGRAPHS WHICH FOLLOW.

NAVAL SHIP FUEL

4. THERE IS A BASIC CONSENSUS THAT F75/F76 (DISTILLATE) FUELS SHOULD BE USED AS THE PRIMARY NATO SHIP FUEL AND THAT IN PRINCIPLE ALL NATIONS SHOULD CONVERT TO THIS FUEL FOR THEIR NAVIES.

5. INVESTIGATION INTO THE STATE OF CONVERSION OF SHIPS TO F75/F76 FUEL AND THE PROVISION OF THIS FUEL AND OF F77/F82 (HEAVY) FUEL OIL ASHORE AND AFLOAT DEMONSTRATED THAT THE PREMISE "F77/F82 FUEL OIL WOULD ONLY BE AVAILABLE IN LIMITED QUANTITIES AND COUNTRIES IN THE POST-1980 PERIOD" IS A MISCONCEPTION.  
CONFIDENTIAL

PAGE 03 NATO 02142 01 OF 02 201318Z

6. THE SITUATION POST-1980 OF THE CONVERSION OF SHIPS TO F75/F76 IS THAT ONLY GERMANY (2 DESTROYERS), THE UNITED KINGDOM (1 ASW AIRCRAFT CARRIER (CVS), 1 HELICOPTER CRUISER (CCH) AND 1 HOSPITAL SHIP), FRANCE (2 FLEET OILERS), PORTUGAL (1 DESTROYER ESCORT (DE), 1 OIL TANKER, 1 HYDROGRAPHIC SHIP), GREECE AND TURKEY WILL HAVE WARSHIPS WHICH WILL REQUIRE F77/F82.

7. GERMANY, THE UNITED KINGDOM AND PORTUGAL WILL CONTINUE TO PROVIDE OILERS (AOS) CAPABLE OF CARRYING F77/F82 IN SUPPORT OF THEIR REMAINING F77/F82 BURNING WARSHIPS.

8. CONCERNING THE PROVISION OF FUEL ASHORE THOSE NATIONS WHICH WILL HAVE SHIPS USING F77/F82 HAVE MADE AND WILL CONTINUE TO MAKE

PROVISION FOR THIS FUEL FROM THEIR MILITARY STOCKS ASHORE BOTH IN THEIR OWN COUNTRY AND IN SOME CASES IN OTHER COUNTRIES AS WELL. BLACK OIL WILL CONTINUE TO BE WIDELY AVAILABLE FROM COMMERCIAL SOURCES.

9. THE OPERATIONAL AND LOGISTIC PENALTIES OF CONTINUING TO OPERATE FEW F77/F82 FUEL OIL BURNING WARSHIPS IN A SITUATION WHERE ALMOST ALL SHIPS AND THEIR SUPPORT BOTH ASHORE AND AFLOAT WILL BE ORIENTED TOWARDS F75/F76 (DISTILLATE) FUELS HAVE BEEN ASSESSED BY THE NATO MILITARY AUTHORITIES AS FOLLOWS:

(A) SINCE THE TURKISH AND GREEK NAVIES WILL GENERALLY OPERATE ONLY IN THE EASTERN MEDITERRANEAN AND THEREFORE HAVE ACCESS TO THEIR OWN MILITARY SHORE STOCKS THE FACT THAT THEIR WARSHIPS WILL CONTINUE TO USE F77/F82 DOES NOT PRESENT ANY SIGNIFICANT OPERATIONAL OR LOGISTIC PROBLEM.

(B) IN RESPECT OF THE OTHER NAVIES THE OPERATIONAL PENALTIES IMPOSED BY F77/F82 BURNING SHIPS ARE NOT SEVERE AND DO NOT JUSTIFY SPECIAL FINANCIAL PROVISION TO OVERCOME THEM. IT IS EMPHASIZED, HOWEVER, THAT IT WILL NOT BE POSSIBLE TO ENSURE SUPPORT FOR F77/F82 BURNING SHIPS IN A MIXED NATO TASK FORCE AND THAT THERE ARE OBVIOUS ADVANTAGES IN TERMS OF OPERATIONAL FLEXIBILITY TO BE GAINED FROM CONVERTING THESE SHIPS TO DISTILLATE FUELS.

10. THE GROUP APPRECIATES THE GREATER OPERATIONAL FLEXIBILITY WHICH WILL BE ACHIEVED WHEN ALL SHIPS ARE CONVERTED TO F75/F76 AND ENDORSES THE VIEW OF THE NATO MILITARY AUTHORITIES THAT  
CONFIDENTIAL

PAGE 04 NATO 02142 01 OF 02 201318Z

STANDARDIZATION ON THIS FUEL IS TO BE ENCOURAGED. IT ACCEPTS THAT THE CONVERSION OF EXISTING SHIPS MAY NOT BE TECHNICALLY OR ECONOMICALLY FEASIBLE BUT STRONGLY RECOMMENDS THAT ALL NEW ACQUISITIONS OR NEW CONSTRUCTION VESSELS SHOULD BE CAPABLE OF OPERATING ON F75/F76.

11. WHILST IT CONCLUDES THAT THERE IS UNLIKELY TO BE ANY SEVERE PROBLEM OVER INTEROPERABILITY OF SHIPS FUELS POST-1980, DISCUSSION HAS REVEALED TWO POINTS WHICH MERIT FURTHER EXAMINATION IN RESPECT OF F75/F76:

(A) THE INTERNATIONAL STAFF SHOULD MONITOR MILITARY STORAGE NATIONALLY AS WELL AS ON A NATO INFRASTRUCTURE BASIS;

(B) THE MAS INTER-SERVICE FUELS AND LUBRICANTS WORKING PARTY SHOULD BE ASKED TO DETERMINE AS AN EXTENSION TO STANAG 1135 WHETHER SUITABLE COMMERCIAL EQUIVALENTS ARE AVAILABLE THUS INCREASING THE FLEXIBILITY OF SHIPS WHICH USE F75/F76.

CONFIDENTIAL

PAGE 01 NATO 02142 02 OF 02 201333Z

ACTION EUR-12

INFO OCT-01 ISO-00 EURE-00 SSO-00 NSCE-00 USIE-00 INRE-00

CIAE-00 PM-04 H-02 INR-07 L-03 NSAE-00 NSC-05 PA-01

PRS-01 SP-02 SS-15 ACDA-07 TRSE-00 SAJ-01 EB-07

FEAE-00 OES-06 /074 W

----- 014557

O R 201130Z APR 76

FM USMISSION NATO

TO SECSTATE WASHDC IMMEDIATE 7056

SECDEF WASHDC IMMEDIATE

INFO CINCLANT

CINCUSAFE

CINCUSAREUR

CINCUSNAVEUR

USCINCEUR

USLOSACLANT

USNMR SHAPE

CSAF

DFSC CAMERON STATION VA

C O N F I D E N T I A L SECTION 2 OF 2 NATO 2142

JET AIRCRAFT FUEL

12. THE WORKING GROUP AGREES EMPHATICALLY THAT NATO SHOULD ADOPT ONE STANDARD PRIMARY FUEL FOR NATO LAND-BASED JET AIRCRAFT. FOR OPERATIONAL, LOGISTIC AND ECONOMIC REASONS THIS PRIMARY FUEL SHOULD BE F34 FOR THE FUTURE. IN PARTICULAR THERE WOULD BE IMMEDIATE ACCESS IN THE EVENT OF HOSTILITIES TO THE TOTAL EUROPEAN JET FUEL PRODUCTION AND THE READY UTILIZATION OF SPARE PRODUCTIVE CAPACITY. ONCE THE BASIC DECISION TO CONVERT TO F34 HAS BEEN TAKEN DETAILED STUDIES ON TECHNICAL POSSIBILITIES FOR CONVERSION, ORDERLY PLANS AND ASSESSMENT OF COSTS CAN BE PUT IN HAND.

13. IN THE MEANTIME, THE QUESTION OF THE USE OF F34 FUEL IN AIRCRAFT AT PRESENT OR ABOUT TO COME INTO INVENTORY WITH ENGINES DESIGNED TO TAKE F40 AS PRIMARY FUEL IS BEING EXAMINED. THE CASE CONFIDENTIAL

PAGE 02 NATO 02142 02 OF 02 201333Z

OF THE F100-P100 ENGINE USED IN F15 AND F16 AIRCRAFT SCHEDULED TO COME INTO SERVICE WITH THE AIR FORCES OF BELGIUM, DENMARK, THE NETHERLANDS, NORWAY AND THE UNITED STATES IS OF PARTICULAR INTEREST.

14. IN THIS CONNECTION THE GROUP HAS BEEN INFORMED THAT THE UNITED STATES INTENDS TO STUDY THE USE OF F34 IN EXISTING INVENTORY AIRCRAFT, GIVING PRIORITY TO THE A10, F15 AND F16 AIRCRAFT. IT IS SUGGESTED THAT THE UNITED STATES SHOULD BE ENCOURAGED TO PUT THIS STUDY IN HAND AS QUICKLY AS POSSIBLE

AND THAT OTHER NATIONS ABOUT TO ACQUIRE THESE AIRCRAFT SHOULD BE URGED TO PARTICIPATE THEREIN. EVEN SO, RESULTS WILL ONLY BE AVAILABLE TOWARDS THE END OF 1976.

15. IN ADDITION ON THE BASIS OF DATA PROVIDED BY NATIONS AND MAJOR NATO COMMANDERS CONCERNING THE COMPOSITION OF THE TACTICAL AIR FORCES WORK IS IN PROGRESS (A) TO IDENTIFY THE ORIBKENS OF TIMING INVOLVED IN CONVERSION OF NATO STORAGE TO F34, AND (B) TO CLARIFY THE DEGREE OF POSSIBLE WEAPON SYSTEM DEGRADATION OF THE F104G AIRCRAFT WHEN USING F34 AS PRIMARY FUEL WITHOUT MAJOR ENGINE MODIFICATION.

16. THE QUESTION OF THE EARLIEST POSSIBLE TIME FOR CONVERSION OF NATO STORAGE FROM F40 TO F34 IS LINKED WITH THE RESULTS OF STUDIES AND DECISIONS CONCERNING NATO'S MAIN TACTICAL AIRCRAFT. IF THE RESULTS OF THE US STUDY MENTIONED ABOVE ARE AVAILABLE BY THE END OF 1976 IT WILL PROBABLY NEED SOME THREE MORE YEARS TO DESIGN, TEST AND INTRODUCE THE REQUIRED AIRCRAFT MODIFICATIONS AND SO THE STORAGE CONVERSION MUST BE SYNCHRONISED WITH THE ENGINE MODIFICATION PROGRAMME. SOME AIRCRAFT POWERED BY J79 ENGINES, SUCH AS F4, F104, WILL REMAIN IN SERVICE BEYOND 1980 AND, UNTIL MODIFIED TO TAKE F34 OR PHASED OUT, ARE LIKELY TO BE THE CONTROLLING FACTOR. ON THE OTHER HAND, IF F16 AIRCRAFT CONFIGURED EXCLUSIVELY FOR F34 FUEL ARE INTRODUCED BEFORE 1980 IT WOULD HAVE NO SOURCE OF FUELD WITHIN CENTRAL EUROPE UNTIL THE STORAGE CONVERSION HAD TAKEN PLACE.

17. IN VIEW, THEREFORE, OF THE UNCERTAINTY SURROUNDING THE INTRODUCTION OF NEW AIRCRAFT AND THE MODIFICATION OR PHASE-OUT OF OTHERS IT MAY BE INEVITABLE THAT THE CENTRAL EUROPE PIPELINE SYSTEM (CEPS) BE REQUIRED TO CARRY BOTH F34 AND F40  
CONFIDENTIAL

PAGE 03 NATO 02142 02 OF 02 201333Z

FOR A CONSIDERABLE PERIOD. THE GROUP THEREFORE REQUESTS THAT THE CEOA BE ASKED TO EXPLORE AND EVALUATE THIS POSSIBILITY. FOR THE EVENTUAL CONVERSION OF STORAGE FROM F40 TO F34 THE EXPERIENCE WITH THE FRENCH PORTION OF THE CEPS CAN PROVIDE VALUABLE GUIDANCE.

18. IN EXAMINATION OF THE CO-ORDINATION REQUIRED FOR STORAGE CONVERSION AND ENGINE MODIFICATION IT APPEARED THAT AN IRREVERSIBLE ENGINE MODIFICATION COULD BE A SOURCE OF FUTURE PROBLEMS. WHILE THE COSTS AND TECHNIQUES INVOLVED COULD ONLY BE EVALUATED DURING STUDIES, IT WAS RECOMMENDED THAT THE POSSIBILITIES OF DUAL-FUEL OPERATING CAPABILITY FOR AIRCRAFT BE SERIOUSLY CONSIDERED. THIS WOULD RENDER THE STORAGE CONVERSION SOMEWHAT SIMPLER AND WOULD CATER FOR THE POTENTIAL UNITED STATES OPERATIONS OUTSIDE THE NATO AREA.

19. IN THIS CONNECTION SOME EXPERIENCE IS EVIDENTLY AVAILABLE WITH DUAL-FUEL OPERATION. FRANCE FOR EXAMPLE HAS COMPLETED CONVERSION FROM F40 TO F34 FUEL, APPARENTLY WITHOUT MAJOR

MODIFICATION TO HER AIRCRAFT, AND IT IS BELIEVED THAT THOSE WHICH NOW USE F34 AS PRIMARY FUEL CAN NEVERTHELESS ACCEPT F40 AS AN ALTERNATE WITHOUT UNACCEPTABLE PENALTIES. UNITED KINGDOM AIRCRAFT ENGINES ARE ALL QUALIFIED ON BOTH F34 AND F40 TO THEIR FULL ENGINE DESIGN PERFORMANCE. BELGIUM HAS BEEN USING F104G AIRCRAFT AT THE FRENCH FIRING RANGE AT SOLENZARA, CORSICA WHERE ONLY F34 IS AVAILABLE WITH NO ADVERSE EFFECTS OR PERFORMANCE REPORTED UNDER THOSE CONDITIONS. THESE USEFUL DATA FROM THESE AND OTHER EXPERIENCES SHOULD BE COLLATED AND MADE AVAILABLE.

20. IN SUMMARY THE WORKING GROUP CONCLUDES THAT THE CHANGE FROM F40 TO F34 AS THE NATO PRIMARY FUEL FOR LAND BASED JET AIRCRAFT APPEARS TO BE FEASIBLE AND WILL CONSIDERABLY INCREASE THE OPERATIONAL FLEXIBILITY OF THE NATO AIR FORCES, BUT IT CANNOT GIVE AT THIS STAGE DEFINITIVE ADVICE ON TIMING OR COSTS OF THE CONVERSION IN ABSENCE OF TECHNICAL DATA WHICH CAN ONLY BE DERIVED FROM DETAILED STUDIES.

21. THE WORKING GROUP RECOMMENDS:

(1) THAT THE UNITED STATES BE ENCOURAGED TO INITIATE URGENTLY THE INTENDED STUDIES ON THE USE OF F34 FOR A10,  
CONFIDENTIAL

PAGE 04 NATO 02142 02 OF 02 201333Z

F15 AND F16 AIRCRAFT;

(2) THAT THE UNITED STATES SHOULD ALSO BE ENCOURAGED TO EXPAND THE STUDY PROGRAMMES AS SOON AS POSSIBLE TO INCLUDE OTHER FIRST LINE AIRCRAFT SUCH AS F111, A7 AND F/RF-4;

(3) THAT THE NATIONS USING THESE AIRCRAFT OR THEIR RELATED ENGINE FAMILIES CONTRIBUTE TO THE UNITED STATES STUDIES TO THE MAXIMUM POSSIBLE EXTENT (E.G. BY CONTRIBUTING DETAILED INFORMATION ON FLIGHT AND BENCH TESTS);

(4) THAT THE CENTRAL EUROPE OPERATING AGENCY BE REQUESTED TO EXPLORE THE POSSIBILITY AND EVALUATE THE CONSEQUENCES OF OPERATING A DISTRIBUTION SYSTEM FOR BOTH F40 AND F34 FOR UP TO FIVE YEARS;

(5) THAT NATIONS HAVING EXPERIENCE OF DUAL FUEL OPERATION SHOULD MAKE INFORMATION AVAILABLE TO THE WORKING GROUP;

(6) THAT IN THE INTERESTS OF FLEXIBILITY OF EMERGENCY SUPPLY ALL NATIONS SHOULD MAINTAIN AWARENESS OF CIVIL JET FUEL PROPERTIES AND KEEP OPEN CHANNELS TO NATIONAL OIL INDUSTRY PRODUCTION SOURCES;

(7) THAT THE MAS SHOULD BE TASKED TO PRODUCE AN EXPANDED LISTING OF EQUIVALENT GRADES COVERING ALL NATIONS SPECIFICATIONS AS AN EXTENSION TO ANNEX C OF STANAG 1135 WHICH LISTS ONLY NATO STANDARDIZED MILITARY FUELS.

FUTURE WORK

22. THE WORKING GROUP PLANS TO HOLD ITS NEXT MEETING ON THE JET AIRCRAFT ISSUE DURING THE WEEK 20TH-23RD SEPTEMBER, 1976. IT INTENDS TO DEVEOTE ONE DAY OF THIS MEETING TO THE CONSIDERATION OF SUBSEQUENT TASKS RELATIVE TO THE FUELS OF

FIXED WING AIRCRAFT, BASED AFLOAT AND ASHORE, AS WELL AS  
SEA-BASED HELICOPTERS AND IDENTIFY ANY OTHER INTEROPERABILITY  
PROBLEM IN THE FIELD OF FUELS REQUIRING STUDY. A SHORT  
PREPARATORY MEETING WILL BE HELD IN THE WEEK FROM 12TH TO  
16TH JULY, 1976 IN ORDER TO IDENTIFY THE TOPICS TO BE  
DISCUSSED IN SEPTEMBER 1976. END TEXT.STRAUSZ-HUPE

CONFIDENTIAL

<< END OF DOCUMENT >>

## Message Attributes

**Automatic Decaptioning:** X  
**Capture Date:** 30 AUG 1999  
**Channel Indicators:** n/a  
**Current Classification:** UNCLASSIFIED  
**Concepts:** n/a  
**Control Number:** n/a  
**Copy:** SINGLE  
**Draft Date:** 20 APR 1976  
**Decaption Date:** 01 JAN 1960  
**Decaption Note:**  
**Disposition Action:** RELEASED  
**Disposition Approved on Date:**  
**Disposition Authority:** ullricre  
**Disposition Case Number:** n/a  
**Disposition Comment:** 25 YEAR REVIEW  
**Disposition Date:** 28 MAY 2004  
**Disposition Event:**  
**Disposition History:** n/a  
**Disposition Reason:**  
**Disposition Remarks:**  
**Document Number:** 1976NATO02142  
**Document Source:** ADS  
**Document Unique ID:** 00  
**Drafter:** n/a  
**Enclosure:** n/a  
**Executive Order:** 11652 GDS TAGS MARR, NATO  
**Errors:** n/a  
**Film Number:** n/a  
**From:** NATO  
**Handling Restrictions:** n/a  
**Image Path:**  
**ISecure:** 1  
**Legacy Key:** link1976/newtext/t197604113/baaaawut.tel  
**Line Count:** 333  
**Locator:** TEXT ON-LINE  
**Office:** n/a  
**Original Classification:** CONFIDENTIAL  
**Original Handling Restrictions:** n/a  
**Original Previous Classification:** n/a  
**Original Previous Handling Restrictions:** n/a  
**Page Count:** 7  
**Previous Channel Indicators:**  
**Previous Classification:** CONFIDENTIAL  
**Previous Handling Restrictions:** n/a  
**Reference:** n/a  
**Review Action:** RELEASED, APPROVED  
**Review Authority:** ullricre  
**Review Comment:** n/a  
**Review Content Flags:**  
**Review Date:** 05 FEB 2004  
**Review Event:**  
**Review Exemptions:** n/a  
**Review History:** RELEASED <05 FEB 2004 by morefirh>; APPROVED <27 OCT 2004 by ullricre>  
**Review Markings:**

Margaret P. Grafeld  
Declassified/Released  
US Department of State  
EO Systematic Review  
04 MAY 2006

**Review Media Identifier:**  
**Review Referrals:** n/a  
**Review Release Date:** n/a  
**Review Release Event:** n/a  
**Review Transfer Date:**  
**Review Withdrawn Fields:** n/a  
**Secure:** OPEN  
**Status:** NATIVE  
**Subject:** n/a  
**TAGS:** n/a  
**To:** n/a  
**Type:** TE  
**Markings:** Margaret P. Grafeld Declassified/Released US Department of State EO Systematic Review 04 MAY 2006